



ATTACHMENT B

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A non-return valve comprising:
a valve body including a fluid passageway which defines a fluid inlet and a fluid outlet located on a low pressure and a high pressure side of the valve, respectively, the fluid passageway being adapted to allow a flow of fluid from the inlet to the outlet; and
a valve diaphragm in the form of a conical-shaped diaphragm having a collapsible aperture located at or adjacent its apex which is orientated in a downstream flow direction and directed toward the high pressure side of the valve, said diaphragm being connected across the fluid passageway, and being rotationally symmetrical about a longitudinal axis which passes through its apex, said diaphragm tapering in wall thickness toward said apex and further being constructed of a resiliently flexible material wherein upon insertion of a nozzle through the collapsible aperture the diaphragm closes about the nozzle to prevent fluid escape whereas upon retraction of the nozzle the diaphragm itself initiates closure of the collapsible aperture, said closure being further promoted by fluid on the high pressure side of the valve to thus prevent fluid flowing in a reverse direction toward the inlet whereas the application of pressure using the nozzle, exceeding atmospheric pressure and that on the high pressure side, to an inlet side of the diaphragm deflects the diaphragm to expose the aperture and allow fluid to flow through the passageway from the inlet to the outlet only.
2. (Original) A non-return valve as defined in claim 1 wherein the pressure is imposed on the inlet side of the diaphragm via a fluid nozzle.
3. (Original) A non-return valve as defined in claim 2 wherein the valve body is designed to fit to a reservoir or tank in which fluid is to be dispensed via the fluid nozzle.

4. (Previously Presented) A non-return valve including a bank or series of non-return valves of similar construction coupled to one another, each of said non-return valves comprising:

a valve body including a fluid passageway which defines a fluid inlet and a fluid outlet, the fluid passageway being adapted to allow a flow of fluid from the inlet to the outlet; and

a conical-shaped valve diaphragm having a collapsible aperture located at or adjacent to its apex, the diaphragm being oriented in a downstream direction, and the diaphragm being connected across the fluid passageway and being rotationally symmetrical about a longitudinal axis which passes through its apex, the diaphragm tapering in wall thickness toward said apex and further being constructed of a resiliently flexible material wherein, upon insertion of a nozzle through the collapsible aperture, the diaphragm closes about the nozzle to prevent fluid escape whereas, upon retraction of the nozzle, the diaphragm itself, in a collapsed condition, effects closure of the collapsible aperture to prevent fluid flowing in a reverse direction toward the inlet whereas pressure imposed, using the nozzle, on an inlet side of the diaphragm deflects the diaphragm to expose the aperture and allow fluid to flow through the passageway from the inlet to the outlet only.

5. (Original) A non-return valve as defined in claim 4 wherein the non-return valves are coupled together with their respective valve bodies at least partly nested within one another wherein said valves are co-axially aligned.

6. (Original) A non-return valve as defined in claim 4 wherein the non-return valves are each of the same construction and configured to abut or engage one another with their valve bodies in alignment.

7. (Previously Presented) A non-return valve as defined in claim 4 wherein the diaphragms are each in the form of a generally conical-shaped diaphragm having the collapsible aperture located at or adjacent its apex which is orientated in a downstream flow direction.

8. (Previously Presented) A non-return valve as defined in claim 1 wherein the valve membrane is formed integral with the valve body.

9. (Previously Presented) A non-return valve as defined in claim 1 wherein the valve membrane is constructed of a mouldable polymeric material.

10. (Previously Presented) A non-return valve as defined in claim 1 wherein the valve body is configured to retrofit to an existing valve stem.

11. (Previously Presented) A non-return valve as defined in claim 1 wherein the valve body is designed to be sealably inserted into a flow line.

12. (Original) A membrane being permeable in one direction only, said membrane comprising a panel or blanket of collapsible diaphragms each including a collapsible aperture and being constructed of a resiliently flexible material which is configured wherein each of the diaphragms themselves effects closure of the collapsible aperture to prevent fluid flowing in a reverse direction whereas pressure imposed on an upstream side of the membrane deflects one or more of the diaphragms to expose the corresponding aperture and allow fluid to flow across the membrane in said one direction only.

13. (Original) A membrane as defined in claim 12 wherein the membrane is multi-layered with a series of said panels or blankets formed adjacent one another.

14. (Previously Presented) A non-return valve as defined in claim 1 wherein the valve diaphragm is inwardly bulging.

15. (Previously Presented) A non-return valve as defined in claim 4 wherein the valve diaphragm is inwardly bulging.

16. (NEW) A non-return valve comprising:

a valve body including a fluid passageway which defines a fluid inlet and a fluid outlet located on a low pressure and a high pressure side of the valve, respectively, in a closed state of the valve; and

a valve diaphragm having both an inlet and an outlet side, being conically shaped and having a collapsible aperture located at its apex,

wherein the fluid passageway and the valve diaphragm, upon insertion of a nozzle through the collapsible aperture, allow a flow of fluid through the nozzle in a downstream flow direction only from the inlet to the outlet,

said apex being orientated in the downstream flow direction and being directed toward the high pressure side of the valve in its closed state, and

said diaphragm being connected across the fluid passageway and being constructed of a resiliently flexible material tapering in wall thickness towards its apex wherein, upon insertion of the nozzle through the collapsible aperture, the diaphragm sealingly forms about the nozzle and wherein, upon retraction of the nozzle, the diaphragm itself initiates closure of the collapsible aperture.